

Chapter 2

THE KING IS DEAD. LONG LIVE THE KING: A Personal History of the Kofa Mining District of Southwestern Arizona

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There have been vague references to gold-bearing breccias and placers in the rocky canyons north of Yuma in Arizona Territory as far back as the 1870s. Mexicans and Indians had been dry washing the gravels in the early 1800s long before any major gold claims were made. This activity obviously continued and in 1873, F. H. Goodwin, Yuma County sheriff and assessor, estimated that about \$10,000 in gold had been traded and bought by local merchants without much attention being paid to where it came from nor how it was acquired by the prospectors.

The winter of 1896 found Charlie Edwards at the head of a narrow canyon in the S. H. Mountains, Yuma County, Arizona Territory. Charlie had been prospecting in the area since 1895, after striking up a 50-50 deal on whatever he found with Epes Randolph, an official with the Southern Pacific Railroad. But he just wasn't having any luck. He followed an old Indian trail, searching for water, when he discovered gold in a small, nearly dried up pool. Charlie searched for the lode and finally found it in a vein along a cliff overhang on the canyon wall. Charlie was certain this was paydirt. But he wasn't certain that Randolph would continue to grubstake him. To make himself appear more credible in the public eye, he took on his full given name, Charles Edward Eichelberger, and went back to Randolph for more financing to mine out the gold he had discovered. But Randolph wasn't convinced that the claims were worth a 50-50 partnership anymore, so Eichelberger brought in Henry B. Gleason, an engineer with the Yuma Light & Water Company. Four lode claims were filed along the vein, and when initial assay values came back at \$1.50 per pound, Randolph was interested again. The three men formed the King of Arizona Mining Company, which operated the mine until 1899 when Eichelberger and Gleason sold their shares. All subsequent references to the company, and the mine, the mining district, the town, and the legend referred to its new nickname, "Kofa."

Thus was the beginning of the first decade-long gold rush to this remote mountain range in the southwestern corner of the Arizona Territory, now called the Kofa Mountains after the grand discovery made there a century ago. The four original claims - the Homestake, the King of Arizona, the Last Hope, and the Mucho Bueno - produced high grade gold ore continuously until 1910. During its lifetime, at least \$3.5 million in gold, and a small amount of silver, came from the King of Arizona Mine, and the Kofa Mining District.

A King is Born

It wasn't gold that first led Charles Eichelberger to the southern end of the S. H. Mountains (now Kofa Mountains). After being hired by Epes Randolph to prospect in the area in 1895, it was a location notice for some abandoned lead claims that took him into the area. It is unclear exactly how the gold discovery was made; some say Charlie found gold in a small pool on the canyon floor and searched for the lode at that point while others say he was following an Indian trail along a ledge of rock off the canyon floor when he saw gold glimmering in a vein along the trail. Whatever inspired him, Eichelberger found the King of Arizona gold vein along a rock cliff well off the canyon floor. But Charlie was broke, and his chief grubstaker Randolph was too skeptical to sink any more of his money into Charlie or any of his wild schemes. For that reason, Eichelberger went to Henry Gleason to enlist his investment support. Additional investors included Tucson lawyer and politician Eugene Ives, and Yuma Mayor R. J. Duncan. Randolph was the fifth investor, but only after threatening to sue if he was left out. Apparently, Randolph felt that if Charlie could get at least three other "reputable" backers interested in the gold mine, then maybe he had been too hasty about pulling his support. These were the five men, though, who formed the first corporation to develop the King of Arizona Mine shortly after its 1896 discovery.

On February 15, 1897, four claims were located along the strike of the vein for about a mile at the crest of some low hills. On April 30, 1897, they were officially recorded. With Epes Randolph as President of the King of Arizona Mining Company, and Eugene Ives as General Manager, the King of Arizona became a mine of major interest and production in the southwest at the turn of the century.

The Making of a King

If the King of Arizona Mine were to survive, water was a necessity. Until drilling for water was started in 1897, it was hauled by ten-mule teams in barrels from the Gila River about 35 miles south of the mine. The mules also brought hay and grain, and returned to the Gila with ore. A five-stamp mill erected at Norton's Ranch near Mohawk was large enough to accommodate the first ore that was shipped. Unfortunately, the King Mine owners discovered that the Mohawk Mill was losing about \$30 per ton in gold to the tailings. A 30-ton cyanide tank was added to the milling operation in 1898 to work 2,500 tons of tailings, but it wasn't enough. It became very clear that there was more ore than could be economically hauled, and that the Mohawk couldn't handle it anymore.

Several solutions were devised to help solve the problem. The first one was to build a bigger and better mill at Mohawk. That was all well and good, but ore transport still had to be considered. A railroad spur or an aerial tram between the mine and the mill were both proposed. While these appeared to be very good ideas, they were too expensive to undertake. A mill needed to be at the site, and that meant water for operations had to be found.

Finding a water source was paramount to continued operations at the King. This became a top priority for the mine owners. A proposed solution to this dilemma was to lay a pipeline from the Gila River to the mine to supply all of its water needs. This idea fell along the wayside, along with the railroad and aerial tram, because of the exorbitant cost. A partial solution was found when water was found in a well at about midway between Mohawk and the King. A small camp was set up with a corral and animal-feeding station for the freight wagon trains and the stage line. In 1897, a well 280 feet deep was drilled at the mine site, with no luck. Drilling continued through 1898 and into 1899. By then the work force had climbed to 125 miners, but many of them had to be laid off until the problem of finding water and handling ore could be solved.

Not too far away, Hiram Blaisdell and his partner S. Morgan Smith were operating a mill at the Venus Mine near Picacho. They had installed the mill illegally because of a dispute in ownership of the mine. A way out would be to move the mill to the King. Randolph and Ives, major owners of the King in 1899, agreed to have the Blaisdell-Smith mill moved to the King and share two-fifths interest with the mill owners. The only condition was that they had to find water first.

That seemed simple enough, so Blaisdell and Smith formed the King of Arizona Construction Company to do just that. Their first well found water at about 1,000 feet some 17 miles from the mine. A second well struck water again only five miles away. Eventually, a steam powered pumping station brought water 1,000 feet to the surface through a 16-inch diameter conduit, after which it was placed in a five-mile long pipeline to the mine and stored in reservoirs above the mine works. It cost the King of Arizona Mine about \$920 a month to keep a water supply at the mine site. That broke down to \$1.25 for every thousand gallons. Costs included labor, fuel to run the pumps, supplies, and distribution of the water at the mine. But the important thing was that the King of Arizona Mine finally had a source of water. The mill was moved, Blaisdell took over as General Manager of the King, and he brought his friend Frank Guerra from the Venus to act as Foreman.

The biggest problem for the water well pumps was the sand that would accumulate at the bottom of the well, choking and restricting water flow. Two wells pumped water for the mine, with one operating 24 hours a day and the second only part time. With this kind of use, the well casings wore out after only four years use. But water was necessary, so costs for upkeep of the wells were figured into overall mine operations.

All seemed right for mining at the King of Arizona until Randolph and Ives decided they weren't happy with the mill or the water wells. They sued Blaisdell for failure to fulfill his part of the contract, who counter-sued for mismanagement and fraud. Blaisdell was successful in gaining an injunction against the mine. After several years in the local courts and finally to the Supreme Court in Washington, D.C., Blaisdell and Smith agreed to an out-of-court settlement, but not before Blaisdell resigned as General Manager in December of 1899. With Blaisdell gone, his friend and Foreman Guerra was replaced by H. T. Dunne. Dunne, in turn, replaced many of Guerra's Mexican miners with

Cornishmen and the King of Arizona went back into peaceful production once again.

The Mother Lode of Arizona Territory

The King of Arizona Mine realized at least \$40,000 in placer deposits alone from the canyon floor below the 1896 discovery. The most productive part of the mine was over a 60-acre area within 70 feet of the surface. Extracting the free gold was easy as the only other metal to be reckoned with was silver, and the mine owners were just as happy to get what silver the mine yielded along with the gold. The ore required only a minimum of grinding and sent 200 tons of ore per day to the crushers at the Mohawk Mill. This meant that the mill's five stamps crushed up to 3,000 pounds of ore per minute as it made its nine-inch drop. During its first five-day run the King of Arizona Mine showed it was "worth its metal" and \$3,000 in gold bullion was deposited on August 7, 1897. The first two tons of ore alone is believed to have yielded in excess of \$1,200 in gold. It was the dollars and cents that made the difference to mine owners those first few months of production. Yuma newspapers were reporting hundreds of thousands of dollars in wealth coming from the King of Arizona Mine, and most of that wealth was within the first few feet of developed ground.

A 750-foot inclined shaft was sunk almost immediately along the hanging wall of the vein. Drifts at the 100-foot level were dug east and west along the vein that ranged from 200 to 2,000 feet in length. Stulls of cottonwood from the Gila River bottom were used to shore up the underground workings. These rounded timbers had to be 16 to 18 feet in length, and 12 to 14 inches in diameter to support the amount of drifting that was going on underground. Just east of the shaft collar was an adit with a steam hoist that took miners in and ore back out. Gold was retrieved along drifts and from stopes from the surface to just below 700 feet.

The deeper the miners dug, the lower the grade of the ore. Seven hundred fifty feet was the lower limit of the lode. Near the surface, the ore, with a ratio of 58:1 gold to silver, averaged \$40 per ton in value while at the lower limit of 750 feet, the value was only \$3 per ton. At the 1998 gold values, that would equate to about \$800 and \$65, respectively. The majority of the wealth was concentrated in the gold, with two ounces per ton at the surface and 0.16 ounces per ton at depth. The hauling cost from the mine to the mill at Mohawk was about \$8 per ton so there was still considerable profit to be made.

Some of the ore at the surface assayed at \$3,000 per ton in gold and thousands of dollars was recovered just by breaking rock and dry crushing the ore. Because of the lack of water, the ore was treated by the cyanide process but not amalgamated. Thirty-five thousand gallons of water was needed daily to treat 100 tons of ore. Once water was available at the mine, some recovery was done by washing a three-inch gouge on the hanging wall to release the free gold. Recovery was greatly improved once the King of Arizona had its own mill. With the Mohawk Mill losing nearly \$30 per ton in gold to the tailings alone, not to mention what was being "high-graded" by miners and owners alike in the first few years of production, the 93% recovery that the mine's own mill realized made investors a much happier lot. The ore was trammed by hand and dumped into the newly built Gates crusher. A revolving screen crushed the ore to one-quarter inch. Low speed Gates rollers continued to crush the ore to 20 X 16 mesh, and high speed rolls brought the ore down to 30 mesh. The finely-crushed ore was sent to six-inch high, 50-foot diameter vats where it was cyanide-leached for eight to ten days. The cyanide process used four and a half pounds of cyanide for every ton of water. Gold and silver were precipitated in zinc boxes, and then smelted into bars for shipment.

In spite of the administrative changes at the King of Arizona Mine during its formative years, 1899 saw the construction of a 100-ton cyanide plant at the mine site. That plant was quickly enlarged to 250 tons. The 125 miners employed at the King that year were laid off for just a short time while the plant was under construction. The cost of running the mine and mill was minimal compared to mine production figures. During the early years, developmental work, stoping, milling, general mine expenses, and taxes came to about \$2.80 per ton. With the mill treating about 200 tons of ore per day, the King of Arizona Mine was profitable indeed.

Working for the King

It didn't take long for the news to spread when gold was discovered in the S. H. Mountains north of Yuma. The gold rush was on. As the discovery developed from a prospect to a working mine, and Kofa camp built up around the bustling mine, the scarcity of water became an ever increasing problem. Not only was it needed for mining to progress, but it was needed for those who would live and work there. In 1896, water was hauled to the burgeoning mine by burros from Alamo Springs about

22 miles away, or from the Gila River more than 35 miles distant. By the time claims were recorded the end of April, 1897, the burgeoning town had 100 residents. Finally, in 1899, when wells struck water at about 1,000 feet deep only five miles from the mine site, the prospect of setting up a permanent camp looked more and more promising. But the nearest supply and shipping point was still Yuma by way of Mohawk. It took a team of horses two days to reach the King Mine from Mohawk, which was 50 miles distant by wagon trail. Eventually, two stage lines would service the area from Tacna on the Southern Pacific Railroad line, but decent roads had to be built first.

Important in the early development of the King of Arizona Mine and Kofa camp, was the first mill site at Mohawk. Not only was this the only means of treating and handling the ore at the time, but it was also the main transfer point for supplies and people. George Norton was a civil engineer with a ranch at a very strategic location to the King. His land was used for construction of the Mohawk Mill. Just 35 miles south of Eichelberger's discovery, and close to the railroad and the Gila River, Norton appeared to be in the right place at the right time. He ran the post office in Mohawk, as well as a small hotel at his ranch. His reputation as a road builder preceded him. Several years prior to the discovery of the King of Arizona Mine, he had been commissioned to build a road from Yuma to Ehrenberg for \$60,000. His was the stage road that delivered mail to Picacho in southeastern California and he was responsible for the landings on the Colorado River at Norton's Landing and Castle Dome Landing. When asked to build a stage road to the King, he saw no problem. When asked to install a telephone line to the mine, his response was the same and when shipments of bullion started arriving from the King, Norton handled them at his ranch.

The residents of the area now realized the need for a permanent camp. It needed a name. The first choice was Gleason, after Eichelberger's partner in the King discovery. But since mine property was stamped with the company's branding iron, "K of A," for King of Arizona, the townsite was called Kofa. A post office was established on June 5, 1899, with Lewis N. Alexander as the first postmaster. Perched along the hillside around the active King of Arizona Mine, the camp grew from a population of 100 before 1900, to 300 by the time the post office was established. At its height, Kofa's population was 750.

Kofa was a quiet, law-abiding community but a few felonies are on record. Joaquin Nogales received a six year sentence for his conviction of arson and "Pinky" Dean, more than likely practicing "the world's oldest profession," was convicted for slashing a miner in her apartment behind a saloon. Outside of these few exceptions, Kofa boasted peaceful, family living. Mine owners were described as decent and honorable. There were no hushed rumors of shady promotions or deals, and no false starts and stops for the mine overall. The Cornish population provided a strong family presence, which attributed to the way of life. All in all, Kofa was a town of solid community life that provided homes for the good, honest people who kept the King of Arizona Mine operational.

Dr. Fraser was the company-hired doctor. He saw that the community and miners stayed healthy for \$2 a month, which came directly from the miners' paychecks. The King's bookkeeper, George Rockwood, kept the mine records healthy. In the years prior to 1900, the miners were mostly Mexicans. Foreman Guerra could get away with paying them low wages. Mexican workers were paid less than \$3 a day for common labor. White miners received \$3 to \$4.50 for an eight hour day. When Dunne took over the foreman's job in 1899, his hiring favored the Cornishmen, the "Cousin Jacks" so prevalent in Arizona's early mining days. The Mexicans still worked as wood cutters and common laborers. The Western Federation of Miners was a strong union presence at the Mine. Company bosses could even retain their memberships if they moved up from the ranks, which was generally the case. Unfortunately, as is true with most union-run mines, miners were either black-balled or fired for not joining. Another \$2 a month was deducted from each miner's paycheck for union dues.

Canvas tents and wood framed buildings sprang up along the hillside in the small company town of Kofa. Businesses included a boarding house and bunkhouse for the miners, a hotel, the company store, a school, and of course, the requisite number of saloons. Chinese immigrants fed the camp's population. When mine operations expanded to include the mill, the town finally appeared large enough to warrant a school in 1900. Edith Rockwood, wife of the King's bookkeeper George Rockwood, was the first school teacher in the tent school that was set up for Kofa's 16 students. Mr. Barker, a foreman in the cyanide plant, also operated a bunkhouse. A corrugated iron roof sheltered six rooms and 30 boarders.

Most of them were Cornish miners. Board was only a dollar a day. Along with the room came cots and pads for the beds. The blacksmith was an Irishman named McGraw. Two of the saloons were owned by Price Omers and Felix Mayhew, future discoverer of the King's sister, the North Star Mine. People and businesses came and went at the mine and in the town. All of them were very important to Kofa's early settlement, and some continued on to gain higher glory in other gold discoveries in the district, as Felix Mayhew did.

Norton's stage line operated on a weekly basis. Passengers paid \$20 for a ticket. A team of four horses was driven by Alex MacBeth, who was also part owner of a store and boarding house in Kofa with Mike Nugent. MacBeth and Nugent also ran the stage and freight line, and were part owners of the King of Arizona.

Bill Keiser is another whose name crops up in the early annals of the King of Arizona Mine and its company town of Kofa. An undated manuscript, "Cornishmen and Chinese Cooks," in the collections of the Century House Museum of the Arizona Historical Society in Yuma, gives modern day readers a vivid description of a miner's life at the turn of the century.

Keiser had taken the rails as far as Mohawk, and hiked the rest of the way to Norton's Ranch. If he wanted to work at the King, and at that time there were few tramp miners who didn't, he needed to see Norton first. In Mohawk, Keiser picked up a large potato, a half pound can of corned beef, and six crackers for a dollar at the general store. That would take care of him until he got to the ranch. When the breakfast bell rang at Norton's Ranch at 6:00 a.m., Keiser was there for his meal of hotcakes and fresh eggs. The stage took him to the halfway point at Burch Station, just in time for lunch - potatoes in their skins, beans, sliced roast beef, gravy, biscuits, and coffee. Until he started earning money at the King, these meals would be fondly remembered.

The King of Arizona Mine and Kofa camp were thriving, busy places when Keiser arrived. Mine employees, business owners, and families wandered the dirt streets and kept the camp bustling. Add to the activity of residents, eight-horse freight teams hauling ore, the stage coach, and an assortment of buggies, wagons, and single-rider horses. Keiser, however, began to have doubts about his work very soon after his arrival. It was a fact that the general foreman, Secum, didn't hire Americans. This was a "Cousin Jack" camp, and Cornishmen were the pre-

ferred mine employees. Keiser had known this before he arrived but was told to wait a few days for Mike Nugent before asking for work. Nugent hired him to work in the cyanide plant under Mr. Barker. It was customary for newly hired miners to stand outside the boarding houses, waiting for one of the "old timers" to invite them to dine inside at the expense of the one doing the inviting. This way, new miners were welcomed into the group and "taught the ropes." Keiser didn't let on that he wasn't Cornish until he got his invitation to join miners already on the King's payroll. Once hired and accepted, however, Keiser bought a blanket, quilt, and pillow on credit at MacBeth's store, and took up residence at Barker's Bunkhouse.

The King's ore vein trended in a southwesterly northeasterly direction, with its dip to the south. The gold was in a rhyolite porphyry. Miners worked on an eroded section of the hanging wall for about 1,000 feet along the strike of the exposed vein. This was the "Glory Hole," and it was yielding a dollar a pound in gold. The morning shift boss met Keiser and his fellow miners at the shaft collar or tunnel entrance. They started their shift with two candles each and got two more after the lunch break. Thirty drillers worked each shift for \$3 a day. With eight pound single jack hammers, they hand drilled a series of 12 holes three to four feet deep. There were three holes on the "cut," three "uppers" for the back, three breast holes, and three lifters. The fuses started at three-foot lengths for the cuts, three feet two inches for the breast holes, three feet four inches for the uppers, and three feet six inches for the lifters. The fuses were lit on a "spit" in the same order that they were drilled. Burning at a foot a minute, this sequence of lit fuses advanced the drifts four feet with every blast.

A "powder monkey" was always on hand to assist the drillers and miners. His job was to take out dull drill bits and bring in fresh ones, to cut the fuses the exact length for the holes, connect the primers, and make certain there was enough dynamite for the blasts. Once blasted, miners "mucked out" and loaded the ore into waiting cars. Turn sheets were used at tunnel intersections to move cars around right angle turns and in the drifts. The turn sheet was a piece of steel about three to four feet square, with a raised oval section in the middle. The loaded ore car was rolled onto the turn sheet over the raised oval. The turnsheet was rotated with the car, and sent off in the direction the miners wanted it to go. For all their efforts, the common mine laborers received \$1 to \$2 a day. More skilled laborers, like

mechanics, carpenters, blacksmiths, engineers, and millmen, could earn \$3 to \$4 for a day's work. Aside from the \$3 a day the drillers earned, they got an additional \$7 per foot as they advanced the drifts. These additional earnings were frequently shared among the driller's co-workers – depending on how cooperative they had been.

The mine superintendent had a lot to do with how productive his men were, and how much money they made for the mine. From its production beginnings in 1897 through 1901, the King of Arizona produced nearly \$800,000 in gold bullion. Mine Superintendents J. R. Gilbert, W. A. Pomeroy, and Horace V. Pomeroy brought in nearly \$3 million more by 1908. M. M. Mendenhall was superintendent the last two years of production until the mine closed in early 1910. Under his leadership, the King produced an additional \$500,000 for its investors.

Aside from making a great deal of money for the owners and investors during its lifetime, the King of Arizona Mine also put bread and butter on the tables of many miners and their families. It saw the rise of a thriving community that endured until the post office closed its doors on August 27, 1928. The King of Arizona Mine has experienced several periods of revival that extended the mine life and added to the wealth until it was finally laid to rest in 1934.

Another Jewel in the Crown

Felix Mayhew came to Kofa in October, 1899. He worked the night shift at the King Mine, and prospected in the hills and canyons during the day. He supplied the King of Arizona Mine with wood for its mill with eight Mexican woodcutters. In 1900, he was appointed deputy to Sheriff Pete Burke, and made a Justice of the Peace shortly afterwards. That same year, he was elected a delegate from Yuma County to the Democratic Convention. Mayhew also operated a saloon in Kofa, but his real claim to fame was what he thought was the northern extension of the King of Arizona gold vein.

Tales of gold discoveries generally have many sides. The Anglo version of Mayhew's discovery puts him in a canyon about two miles north of the King looking for water for his Mexican woodcutters' burros. The burros were used to haul ironwood and mesquite to the King Mine for fuel as some wood was brought as far away as ten miles from the mine. Erosion in the canyon exposed a gold-bearing quartz vein that Mayhew filed under the name of the North Star Gold Mine. The Mexican-American version is

that one of Mayhew's woodcutters found the gold ore. Since the woodcutter was not an American citizen, he could not file a claim (the United States mining laws required locators to be citizens or at least persons who had declared an intention to become citizens). He showed the ore to Mayhew, who filed the claim, taking credit for the discovery.

There were four lode claims staked along a ledge and filed on January 1, 1907 – the North Star 1, 2, and 3, and the Arizona. There were also four placer claims filed at the same time. All of them were patented. The lode vein was along a fault zone with andesite breccia on the hanging wall. The east/west strike of the vein dipped to the north, with an average vein width of about ten feet. This differed somewhat from the King's geology in that the east/west striking vein was in rhyolite and dipped to the south, with an average vein width of 30 feet. The ore was high grade, fine-grained free gold and occurred in shoots and chimneys in the lode-like vein. There was also some minor silver, just like the King, but one claim contained sulfides with an assay of \$42 per ton of ore. This suggested the deposit was not connected with the King, as sulfides did not occur at the King. Maybe this was a continuation of the King, or maybe this was a new and different gold deposit. Whatever the origin, it meant more wealth in gold for whoever developed it.

Shortly after Mayhew's discovery, he sold the North Star Gold Mine for \$350,000 to New Yorkers C. H. Fay and E. M. Rogers, and Denverites R. K. Humphreys and F. N. Rogers. Almost immediately, they sold the mine to the Golden Star Mining Company in 1907, probably for a considerably larger amount (it was estimated to be around \$500,000). The Golden Star Mining Company operated the North Star Gold Mine until it closed in 1911.

The North Star and the King were similar in that the most wealth was realized from near surface workings. The North Star yielded nearly \$10,000 in a 17.5 ton test lot of high-grade ore at the surface with visible gold. In 1908, the Golden Star Mining Company built a 50-ton cyanide plant and crushing mill. The plant operated on water drawn from the King's wells. During that year, less than \$10,000 in gold was recovered so the plant was quickly enlarged to a 100-ton operation for more efficiency. Some of the low production figures may have been due to other reasons, like theft in the form of high-grading the ore, but with much of the attention still on production at the King of Arizona, high-grading at the North Star was easily done. Actual production figures and wealth realized from

the workings is not known, but what is recorded is \$1,085,000 in gold and \$15,000 in silver, for a total of \$1,100,000 during the production years of 1907 to 1911. More realistic values could have been double that amount.

By the Light of the North Star

Two shafts were sunk at the North Star Mine. The #1 went to 90 feet, and the #2 went to a depth of 500 feet. From the main inclined shaft, a series of drifts and crosscuts were dug at 100 foot levels. A total of 4,000 feet of drifts made up the entire mine's underground workings. A steam hoist at the shaft collars lowered and raised men and ore. The ore was amalgamated and cyanide leached to extract the gold.

Just like the King of Arizona, the deeper the North Star workings went, the less gold they found. At the surface, reports of \$6 to \$20 in gold per pound abounded, but beyond the lode, the values quickly dropped to about \$2 a ton. Unlike the King, however, the width and depth of the workable vein wasn't as extensive, so profitable ore was depleted at a shallower depth at the North Star than it was at the King.

Another reason the North Star wasn't as profitable as the King had to do with milling costs. The high content of quartz in the gangue made milling more difficult and more expensive. Mining and milling costs ran about \$14 per ton, compared to only \$3 per ton at the King. Finally, a fire in 1909 destroyed the main shaft, costing mine owners several thousand dollars to repair before production could resume. With the initial half million to purchase the mine, mill installation, and operation costs, and \$1,100,000 in gold bullion mined, Golden Star Mining Company stockholders probably realized \$140,000 profit from their investment of more than \$750,000.

Until the North Star closed in 1911, 100 miners established the camp of Polaris to work the gold vein. A post office was established on June 17, 1909, with William R. Wardner at the helm as postmaster. The camp aptly got its name from its location at the North Star Mine. Polaris was in its prime in 1910 with a population of 339, which included the miners and business operators, and their families. Just like its sister Kofa, Polaris had the appropriate number of boarding houses, saloons, and support businesses. The boarding house was run by a Chinese immigrant, Charles Sam, who accepted meal tickets issued by the Golden Star Mining

Company in exchange for his fare, but charged 50 cents for any extra meals.

The typical, turn-of-the-century mine worker earned \$3 a day. This is reflected in the "time check" for Sam Parker, who worked in the North Star and lived in Polaris. It showed a record of 21 shifts and gross earnings of \$63. The check also showed deductions of \$22.50 for board, \$5 for his tab at the company store, and \$1.50 for doctor's services. That didn't leave Sam much "to play with," but it was a fair accounting of wages earned and spent for the miners of his time.

Polaris and the North Star Mine had its share of gossip to keep the townsfolk interested and interesting. High on the list of the most-talked-about people was Felix Mayhew, the North Star's discoverer. He married the widow Carmelita Romero, but conveniently forgot about his common law wife, Mary Zabala. Zabala filed for divorce and asked for half of what Mayhew received for selling the mine in 1907, but eventually settled on \$23,500. Dan Breslin, Mayhew's original partner, also sued for 10% interest in the North Star as a finder's fee for helping to sell it and received \$2,000 for his legal maneuvers. Such was life in the early mining camps of Arizona Territory. Such was life in Polaris.

The North Star Mine lasted about as long as the King of Arizona Mine. Because of a drop in the metal content of the ore and the high cost of treating it, the mine closed in 1911. Polaris continued on for a few more years, but when the post office was discontinued on July 31, 1914, Polaris joined the ranks as one of Arizona's ghost town mining camps.

The Later Years

The King of Arizona and the North Star mines lay dormant for several years, until the New King of Arizona Mining Company was organized in 1918. William Judson Johnson and James E. McClaren were the principal owners, with the former as the new mine's secretary/manager, and the latter a promoter. Several hundred feet of new tunnels and drifts were dug and one of the older shafts was used as ventilation for the new underground workings. The new owners decided a different source of water was needed for the mine to continue on into the next decade. A site in the canyon site about three miles above the mine looked good for retaining natural runoff. A 32-foot rock dam was constructed resulting in a square mile reservoir and a pipeline using Mother Nature's own gravity with 300 pounds of pressure brought water down to the mine. Power

was still needed to distribute water once it got to the mine and new engines burned "Tops," an oil that could be bought in California for 10 cents a gallon. For \$25 a day, the pumps could now bring water to the mine as compared with the old King's expenses of \$100 a day for wood fuel. Still, the engines to run the pumps and the initial set up was too expensive an undertaking, even for the new owners and it was decided that wood was probably still their best source of fuel. There was a stockpile left over from the original operation, but additional wood for fuel would have to come from the Pacific Coast.

New assays on the King's ore looked fairly profitable. The highest ore assayed at \$69.45 and the lowest \$7.85 per ton with an overall average was at least \$20 a ton. So a new and more modern, 50-ton capacity mill was proposed for the New King. The idea was to mine only high grade ore as labor was still relatively cheap. Native Arizonans and Mexicans would work for \$2 to \$3, and more skilled labor could be had for \$5 for an eight-hour day.

Even with all this research and additional information, the New King of Arizona Mine could not see a profitable future. From 1911 to 1920, a few lode and placer gold claims and several hundred ounces of silver produced about \$170,000 worth of profit for the owners. However, the kind of production that the King of Arizona and the North Star mines saw in their heyday was long gone; and so, once again, the mines and towns were put to rest.

Both mines and the accompanying towns of Kofa and Polaris lingered on through the 1930s. From 1924 to 1934, another \$42,000 profit came from the mine workings, but little work, other than surface prospecting and road improvements, had been done since it closed in 1910. In 1931, the official records show the King's owner as Mrs. Mary Huffman and Kofa still had two families living there. The North Star Mine was still owned by the Golden Star Mining Company, and work there since closing in 1911 was similar to that at the King – some assessment work on outlying claims and road maintenance. Polaris also had only a couple families living within the town limits.

Some refused to let the King of Arizona fade away altogether. In 1941, Colonel William A. Otis, then the owner of the King, commissioned Arthur Houle to look into the future of the King of Arizona Mine. Houle's exploration work, done in the main shaft, found good, millable ore in three shoots on the footwall below the main tunnel level. With the 1941

gold values at \$35 an ounce, it was conceivable that reopening the King's underground tunnels could prove profitable as gold assayed at \$4 a ton of ore. A considerable amount of work needed to be done to retrieve the King and a new development program included reopening the mine at the main tunnel level. Both the King of Arizona Claim and the Homestake Claim needed further exploration on their western halves and Houle was certain the gold was there. The main shaft all the way to the 700-foot level needed to be rehabilitated and both the hanging wall and the footwall would have to be explored further with the use of diamond drilling. If this exploration proved favorable, then surely another shaft could be sunk to develop the ore, as well as find a water source underneath the mine. The water could then be used to run a 300-ton per day mill. Houle also proposed retreating the 600,000 tons of tailings left behind from the earlier operation. Nearly 80% of recoverable gold could be had with at least 200 tons per day being treated at a cost of 65 cents per ton.

Based on these findings, Houle strongly encouraged Otis to reopen the mine in 1941. There was a fair value assigned to the property at that time and the proposed royalties were really not too far out of line, based on the current assay values and price of gold, and the royalties could be applied to Otis' purchase price. Houle was certain gold values could be extended in the main ore shoot to greater depths. He also saw the possibility of a good ore body at the adjoining ends of the King and Last Hope claims. The Homestake Claim showed a large tonnage of mineable ore between the surface and the second level. There was also a large tonnage of \$35 an ounce gold in the old workings all the way to the sixth level. Houle also imagined further exploration along the footwall and hanging wall, and of course, there was gold recovery possible from the old tailings. The price for reconditioning the mine for production all the way to the seventh level was fixed at \$50,000. Otis turned him down.

The last bit of exploration that was done on the King of Arizona Mine in 1945 showed the manway completely closed by a cave-in at about 250 feet below the surface. The hoisting compartment was still open, but there really was nothing to hoist because of an overall deterioration of the underground workings. Some areas of the mine were caved within 100 feet of the surface. Pillars had been robbed along tunnels to just below the 100-foot level resulting in the slumping of the hanging wall and sending cracks to the surface. Since the

North Star Mine had been abandoned decades before the 1940s exploration in the area, there really wasn't much left to do with the once great King of Arizona Mine.

The Last Hurrah

When the alarm sounded that there was gold to be found and fortunes to be made in southwestern Arizona Territory at the turn of the century, droves of people migrated to the desert mountains and canyons to claim their share. But what of Charles Edward Eichelberger, a.k.a. Charlie Edwards, whose discovery spawned this gold rush? When he and his partner, Henry Gleason, sold their claim to the King, Eichelberger took his portion in cash and stock. It is said that he sold his stock for more than \$250,000. He invested his money in a laundry in San Francisco and lost it all in the fires that were the aftermath of the 1906 earthquake. Poor Charlie! He failed to insure his investment. He went back to prospecting near Quartzsite, and discovered the Success Mine, later called the Apache. When that discovery didn't do well for Charlie, he sold it. Eichelberger never recouped his losses, and it is said he died in poverty.

At the close of World War II, the mighty gold producers of the southwestern Arizona desert heaved a final sigh. For more than a decade from 1897 to 1911, in excess of \$4 million in gold bullion poured out of the mountains and into the markets of west coast towns and cities. There are some old timers who laugh at the figures that show in the annals of Arizona gold mine history. They know that \$4 million doesn't even come close to what the King of Arizona Mine yielded. Closer to \$14 million or more, is what they say. The cry of "Thar's gold in them thar hills!" can probably still be heard through the canyons of the southern Kofa Mountains on a clear, cold night in 1996. The King is dead! Long live the King!

Selected Bibliography

Barney, James M., "Arizona's Trail of Gold," *The Sheriff Magazine*, April, 1949.

Elsing, Morris J., and Robert E. S. Heineman, "Arizona Metal Production," Bulletin No. 140, Arizona Bureau of Mines, University of Arizona, 1936.

Granger, Byrd H., *Arizona Place Names*, University of Arizona Press, 1960.

Hall, Charles F., "Report of the Mutual Mining and Leasing Company," July 1, 1915.

Hewitt, D. F., Eugene Callaghan, B. N. Moore, T. B. Nolan, W. W. Rubey, and W. T. Schaller, *Mineral Resources of the Region Around Boulder Dam*, U. S. G. S. Bulletin No. 871, 1936.

Houle, Arthur, "The King of Arizona Property, Kofa," Yuma County, Arizona, September 29, 1941.

Jones, Edward L., Jr., *A Reconnaissance in the Kofa Mountains Arizona*, U. S. G. S. Bulletin No. 620-H, 1915.

Keiser, William, *The King of Arizona Mine*, "Cornishmen and Chinese Cooks," from Keiser Collection of the Century House Museum, Arizona Historical Society, Yuma, Arizona, original undated, Calico Print IX, 3, May, 1953.

Keith, Stanton B., *Index of Mining Properties in Yuma County, Arizona*, Bureau of Geology and Mineral Technology (now Arizona Geological Survey) Bulletin 192, 1978.

Knox, Oscar A., "Report on the Property on the New King of Arizona Company, Yuma County, Arizona," undated but probably late 1919/early 1920.

Lenon, Robert, "Mining in the Yuma Area," from "Westerners Talk," March 15, 1984.

Love, Frank, *A Guide to the Ghost Towns and Mining Camps of the Yuma and Lower Colorado Region*, 1988.

Love, Frank, *Mining Camps and Ghost Towns: A History of Mining in Arizona and California Along the Lower Colorado*, Westernlore Press, 1974.

MacDonald, W. A., "Report on the New King of Arizona Mine, Yuma County, Arizona," to W. J. Johnson, late 1919/early 1920.

Morning Sun newspaper, "The New King of Arizona Mine Rich in Gold Ore," Yuma, Arizona, November 26, 1919.

Murbarger, Nell, *Ghosts of Adobe Walls*, Treasure Chest Publications, Inc., 1964.

Myrick, David F., *Railroads of Arizona Volume I: The Southern Roads*, Howell-North Books, 1981.

Paher, Stanley W., *Southwestern Arizona Ghost Towns*, Nevada Publications, 1981.

Raymond, Rossiter W., *Statistics of Mines and Mining in the States and Territories West of the Rocky Mountains*, 1874.

Sherman, Barbara H. and James E., *Ghost Towns of Arizona*, University of Oklahoma Press, 1975.

Stone, Edwin A. and Truman H. Kuhn, "The King of Arizona Mine, Yuma County, Arizona," March 1, 1945.

Tenney, J. B., *History of Mining in Arizona*, open file report, Arizona Bureau of Mines University of Arizona, 1929.

Thompson, Arthur Perry, "The King of Arizona Region, Yuma County," *Arizona Mining Journal* Vol. IX, No. 7, August 30, 1925.

Trimble, Marshall, *Roadside History of Arizona*, Mountain Press Publishing Company, 1986.

Willson, Roscoe, "Arizona Days: The King of Arizona," *Arizona Republic*, Phoenix, Arizona, May 9, 1968.

Wilson, Eldred D., *Geology and Mineral Deposits of Southern Yuma County Arizona*, Arizona Bureau of Mines (now Arizona Geological Survey) Bulletin No. 134, 1933.

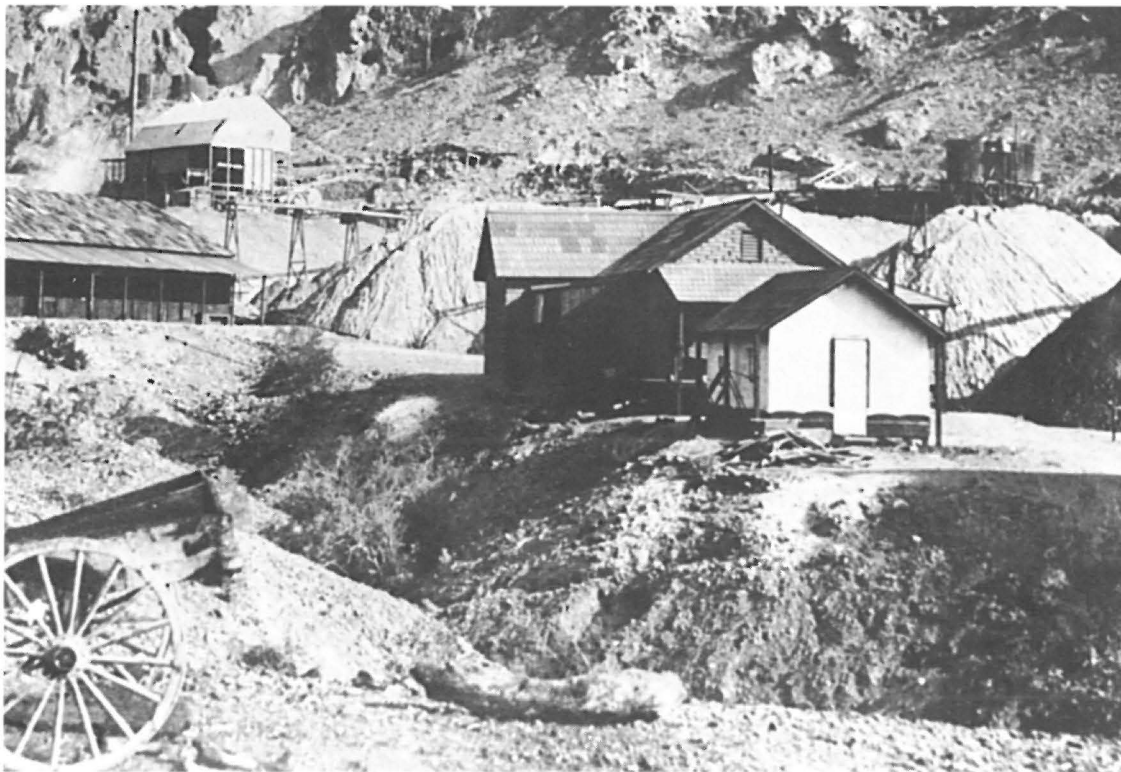
Wilson, Eldred D., J. B. Cunningham, and G. M. Butler, *Arizona Lode Gold Mines and Gold Mining*, Arizona Bureau of Mines (now Arizona Geological Survey) Bulletin No. 137, 1934.



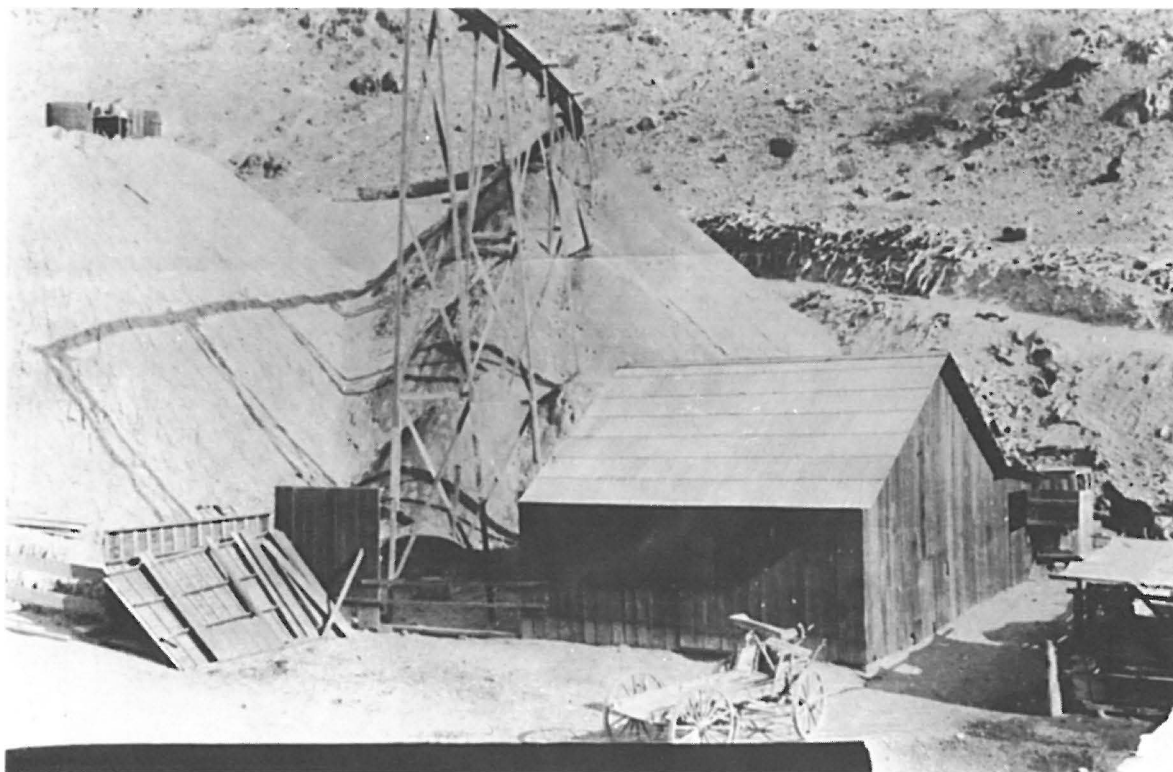
King of Arizona Mine and Mill, foreground; Kofa behind, early 1900s. Courtesy of Arizona Historical Society/Yuma.



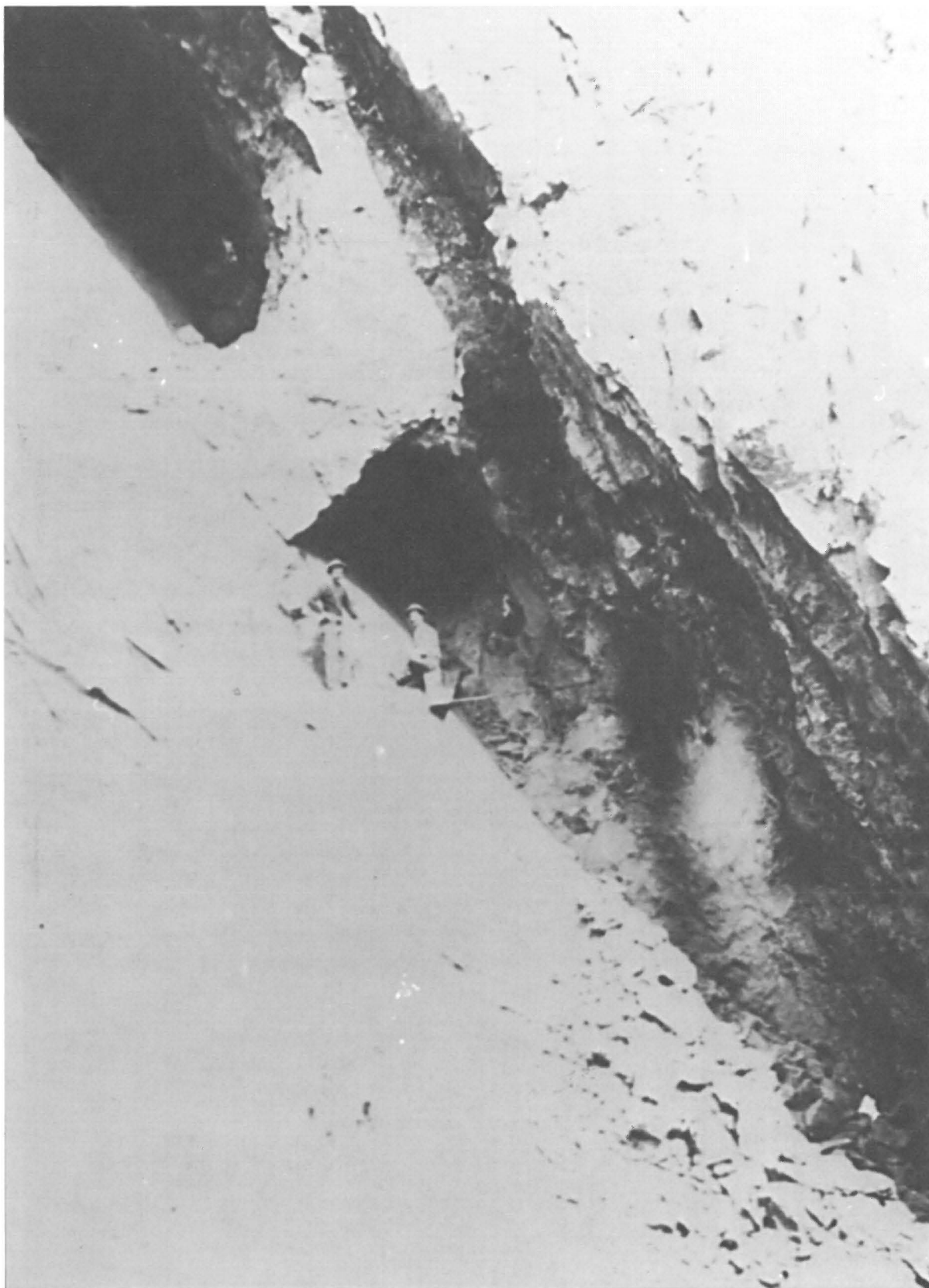
The King of Arizona Mine, early 1900s. Courtesy of Arizona Historical Society/Yuma.



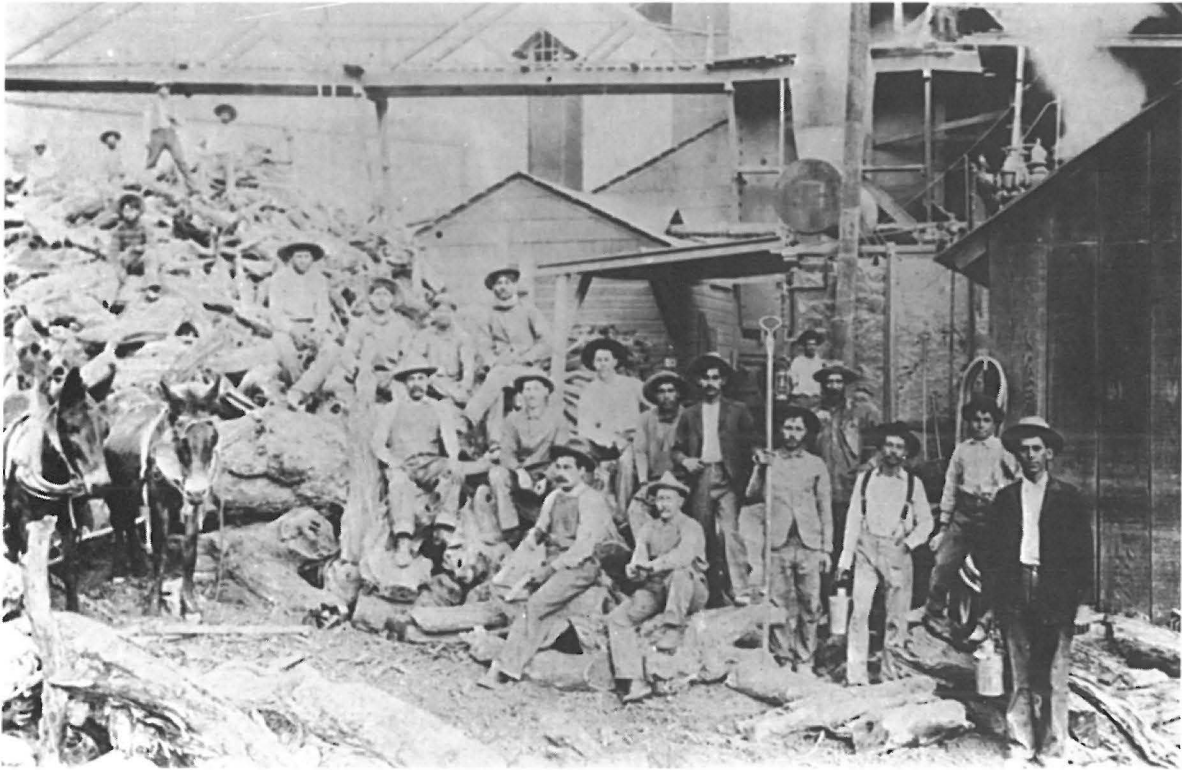
The King of Arizona Mine and Mill, early 1900s. Courtesy of Arizona Historical Society/Yuma.



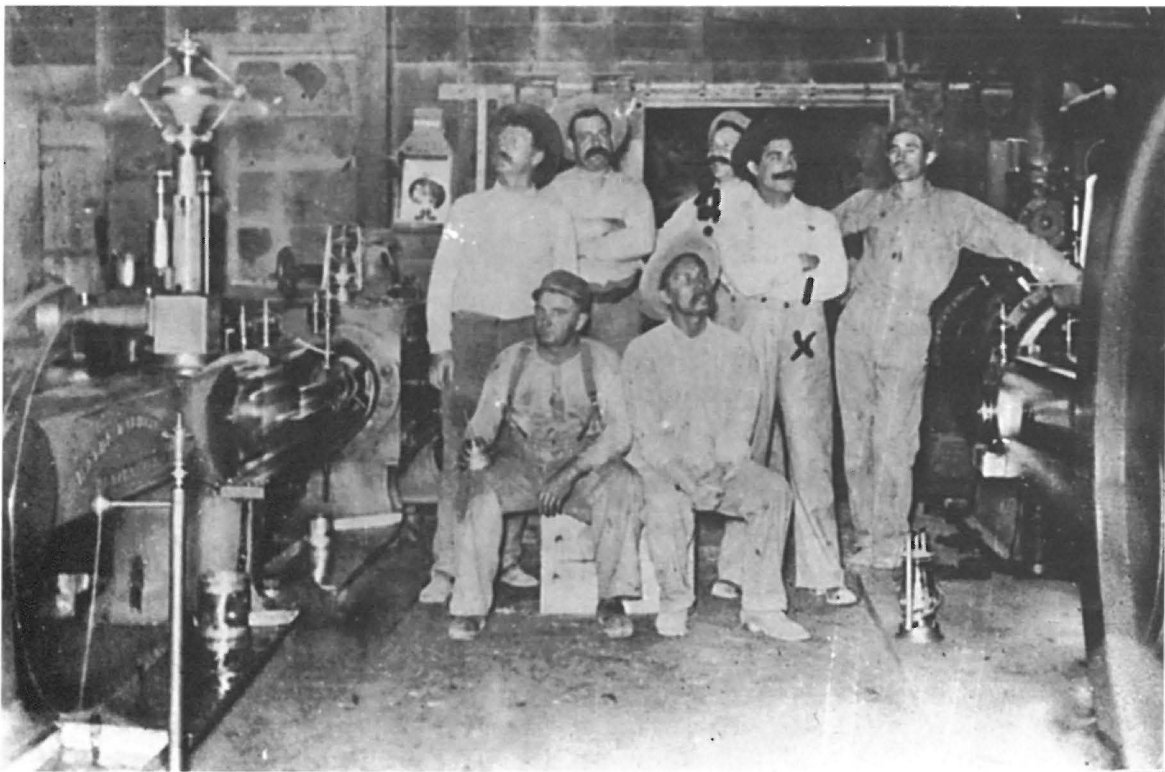
The King of Arizona Mill, early 1900s. Courtesy of Arizona Historical Society/Yuma.



King of Arizona "Glory Hole," 1909. Courtesy of Arizona Historical Society/Yuma.



The King of Arizona Mill and crew. Note wood fuel for mill operation, 1910. Courtesy of Arizona Historical Society/Yuma.



Inside the King of Arizona's mill with air compressor crew, about 1910. Courtesy of Arizona Historical Society/Yuma.



King of Arizona gold bullion shipment ready to leave for Norton's Ranch. King's bookkeeper, George Rockwood, stands with shotgun, 1902. Courtesy of Arizona Historical Society/Yuma.



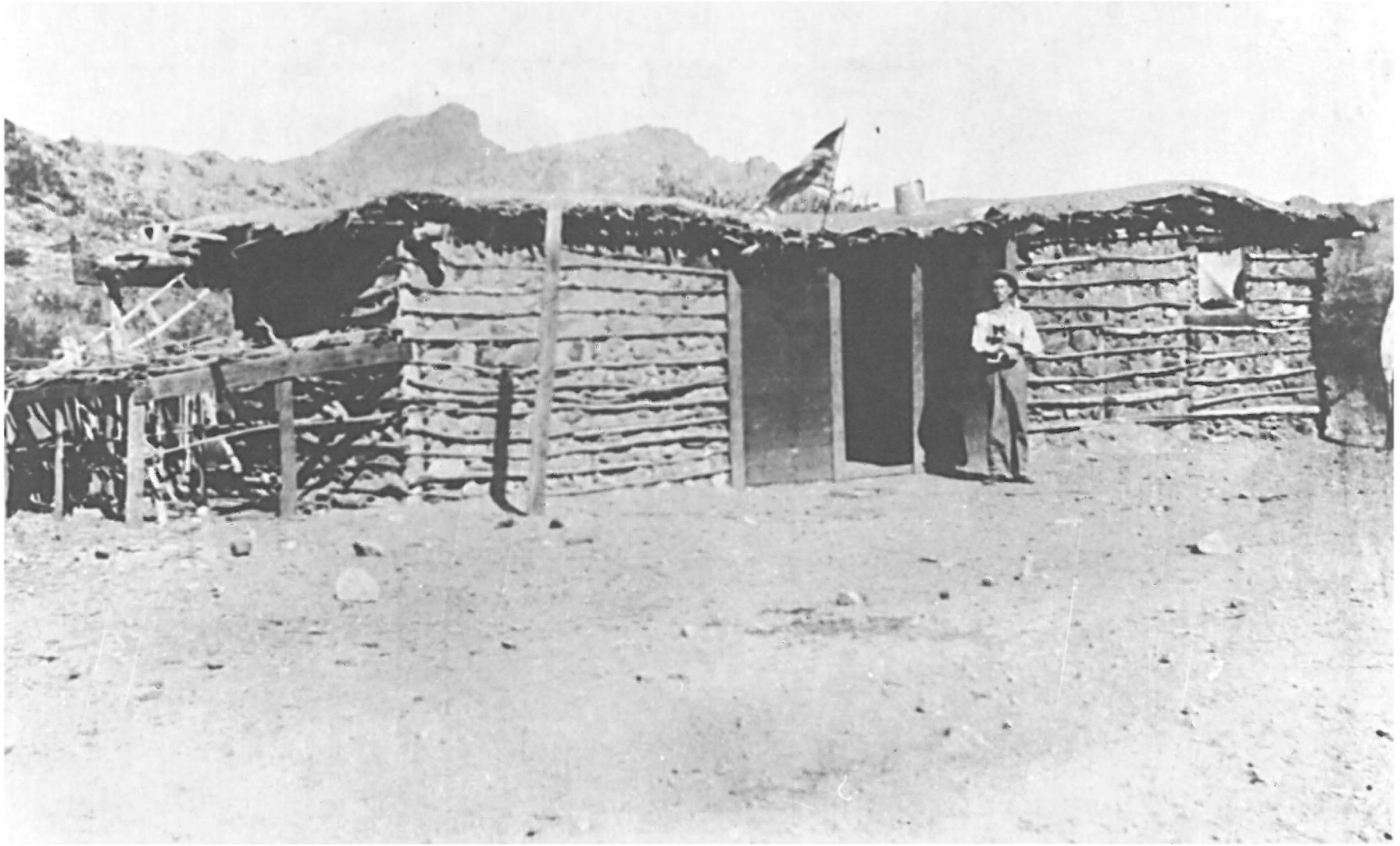
Alex MacBeth readies the stage for departure at Kofa, early 1900s. Courtesy of Arizona Historical Society/Yuma.



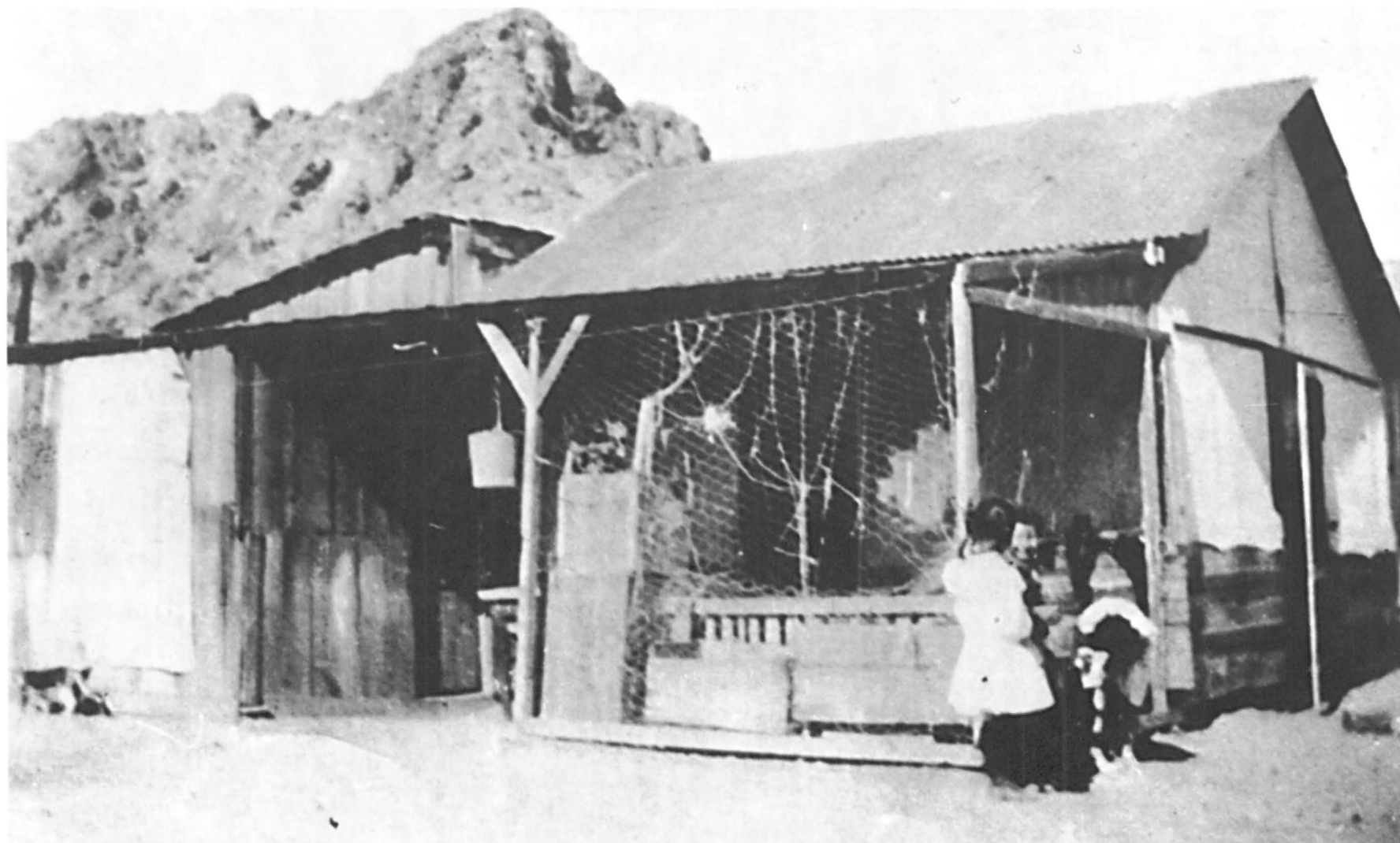
The Kofa Hotel, early 1900s. Courtesy of Arizona Historical Society/Yuma.



Price's saloon in Kofa. Owner Price Omers seated far right, Felix Mayhew standing behind Omers, bartender John Nummell seated left of door, miner Bill Keiser far left, 1898. Courtesy of Arizona Historical Society/Yuma.



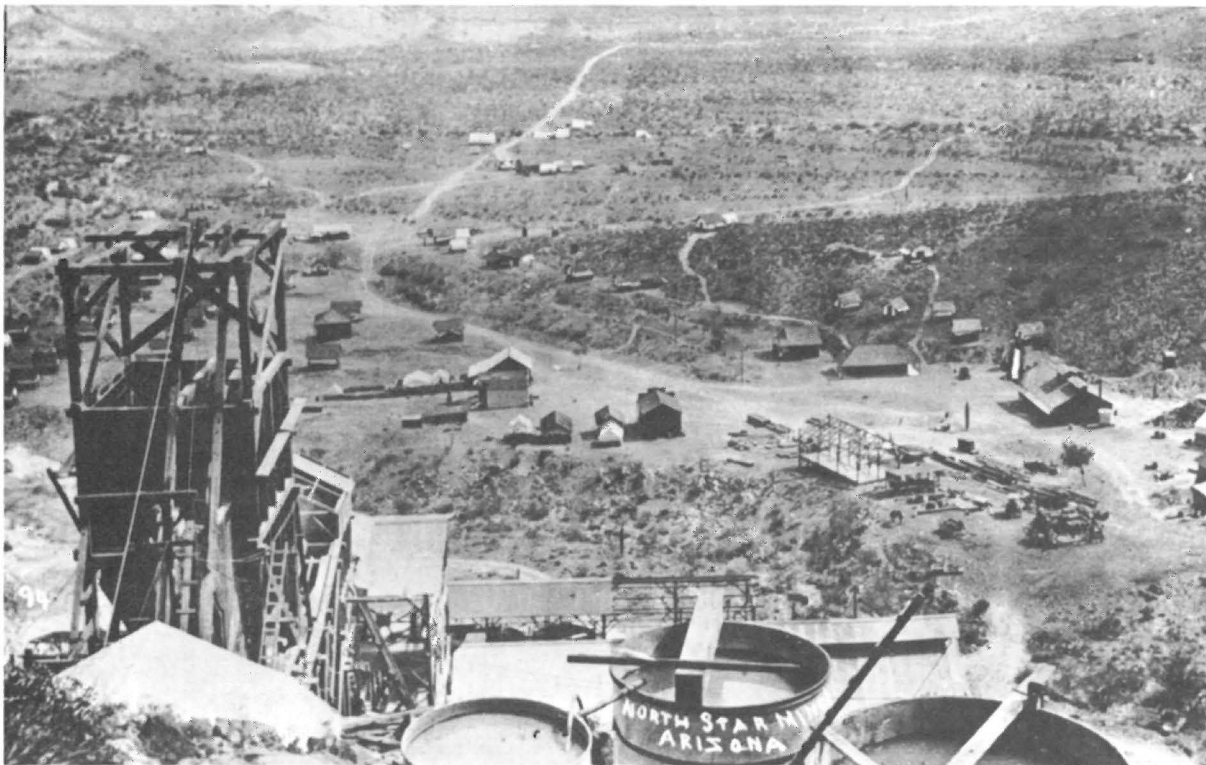
Typical miner's cabin at the King of Arizona Mine. "Brass Band Bill" Smith; early 1900's. Courtesy of Arizona Historical Society/Yuma.



Typical family home in Kofa. Young girls Belen, left; Aurora, right. Courtesy of Arizona Historical Society/Yuma.



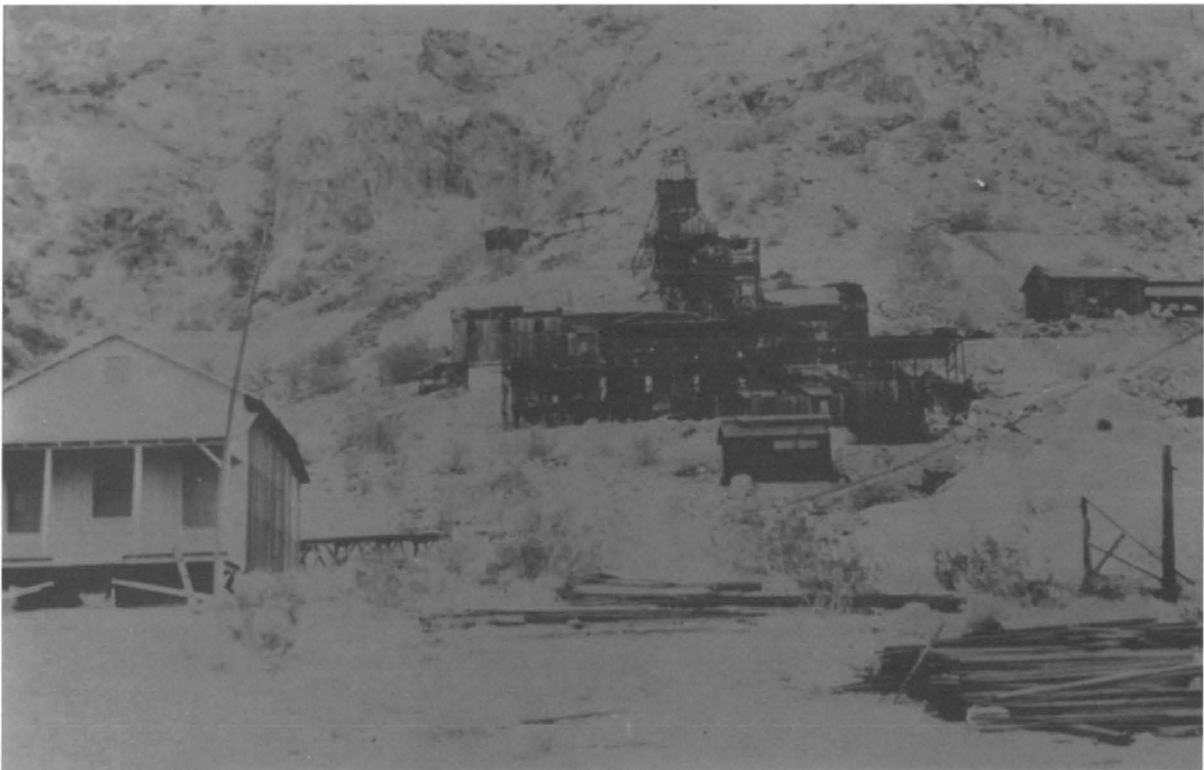
Felix Mayhew, far left, discoverer North Star Mine, and wife at home in Kofa, 1928. Courtesy of Arizona Historical Society/Yuma.



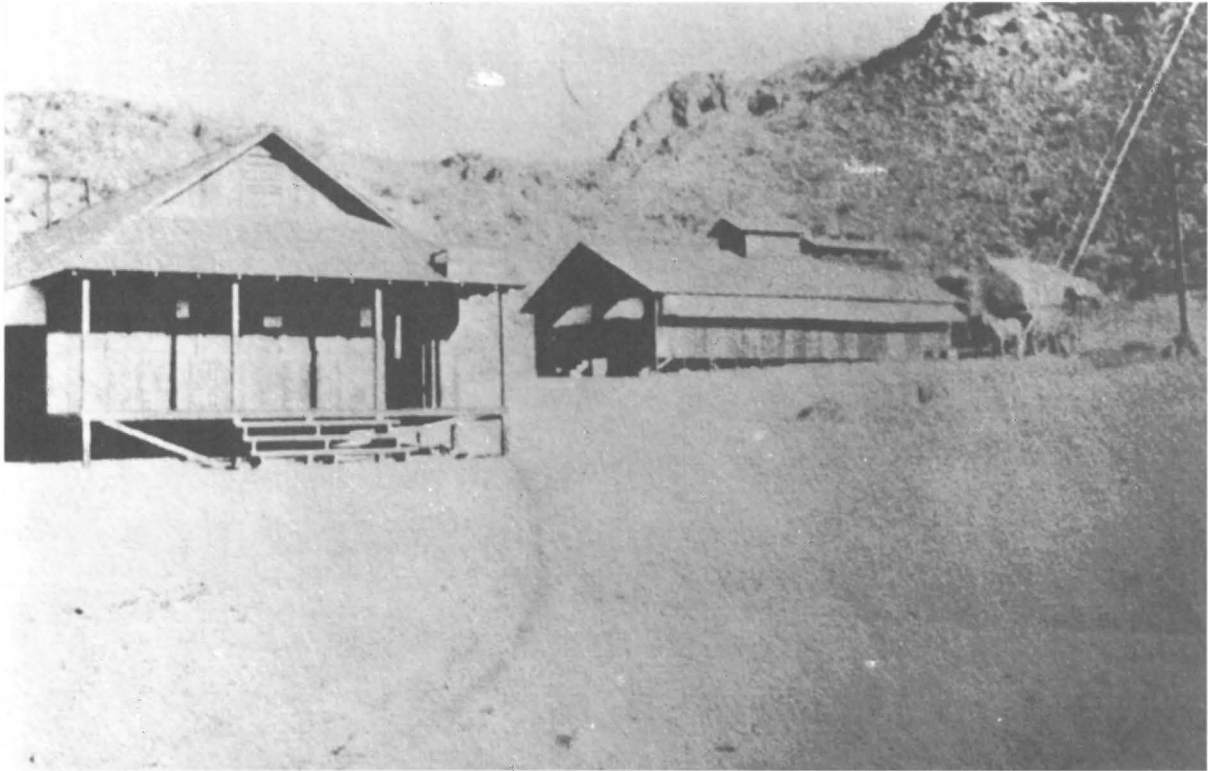
North Star Mine and cyanide leaching vats; Polaris, background, 1908. Courtesy of Arizona Historical Society/Yuma.



North Star Mine and Mill, and Polaris camp, 1910. Courtesy of Arizona Historical Society/Yuma.



North Star Mine and Mill. Note construction material, lower right, 1910. Courtesy of Arizona Historical Society/Yuma.



Post office in Polaris, North Star Mine, 1910. Courtesy of Arizona Historical Society/Yuma.



North Star Mine's company store in Polaris with clerk Paul Hobby, 1908.. Courtesy of Arizona Historical Society/Yuma.



Charles Sam, standing with raised glass, at his boarding house in Polaris, with residents. About 1910.. Courtesy of Arizona Historical Society/Yuma.



Common means of transportaion in and around Polaris. About 1910.. Courtesy of Arizona Historical Society/Yuma.

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Editors
J. Michael Canty
H. Mason Coggin
Michael N. Greeley

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